

Claims

[c1] 1. A device capable of integrating a card-reading function and an instruction-input function, having a printed circuit board (PCB) and a transmission interface on the printed circuit board for coupling to an external device, comprising:

a memory card connector implemented on the printed circuit board for electrically coupling a memory card and accessing the memory card;

a human-machine interface module implemented on the printed circuit board for storing an outside-instruction and producing a break instruction; and

an integrated chip electrically coupling to the transmission interface, the memory card connector and the human-machine interface module, wherein the integrated chip is capable of parallel processing input/output of the memory card connector and transmitting the break instruction from the human-machine interface module to the external device.

[c2] 2. The device of claim 1, wherein the transmission interface comprises a serial bus interface.

[c3] 3. The device of claim 2, wherein the serial bus interface

comprises a universal serial bus (USB) interface.

- [c4] 4. The device of claim 1, wherein the transmission interface comprises a parallel transmission interface.
- [c5] 5. The device of claim 4, wherein the parallel transmission interface comprises a parallel port.
- [c6] 6. The device of claim 1, wherein the memory card connector comprises at least one socket.
- [c7] 7. The device of claim 1 or claim 6, wherein the memory card connector is able to electrically couple to at least one of the many formats of a memory card.
- [c8] 8. The device of claim 1, wherein the human-machine interface module support devices including a button-type receiver, a wireless receiver, or an infrared receiver.
- [c9] 9. The device of claim 1, wherein the device further comprises a cover, and a keyboard or a mouse position corresponding to the button-type receiver on the cover as input media.
- [c10] 10. An integrated chip capable of integrating a card-reading function and an instruction-input function, comprising:
an interface engine, for processing serial/parallel information to an external device;

a memory card interface module, for transmitting an input/output from/to a memory card;

a common input/output module, for receiving a break instruction from one of the many different formats of an input interface;

a memory module electrically coupling to the interface engine, the memory card interface module for storing the input/output and a concurrent program; and

a micro-controller electrically coupling to the interface engine, the memory card interface module, and the common input/output module and the memory module for processing the input/output and the break instruction from the memory card interface module and the common input/output module, wherein the micro-controller controls the transmission between the memory module and the external device through the interface engine.

- [c11] 11. The integrated chip of claim 10, wherein the interface engine comprises a serial interface engine.
- [c12] 12. The integrated chip of claim 10, wherein the interface engine comprises a parallel interface engine.
- [c13] 13. The integrated chip of claim 10, wherein the memory module is further comprising:
 - a buffer device electrically coupling to the micro-

controller and the memory card interface module for temporarily storing the input/output between the external device and the memory card; and an program execution device electrically coupling to the micro-controller for storing the micro-controller's operational and concurrent program.

- [c14] 14. The integrated chip of claim 10, wherein the memory card interface module supports at least one of the many formats of a memory card.
- [c15] 15. The integrated chip of claim 10, wherein the common input/output module supports interfaces includes a button-type receiver, a wireless receiver, or an infrared receiver.